

## Message Text

SECRET

PAGE 01 STATE 017313  
ORIGIN NODS-00

INFO OCT-01 ISO-00 /001 R

DRAFTED BY OES/APT/SA:RBEDDINGTON:MLK  
APPROVED BY OES:PTMINK  
NSC - BHUBERMAN  
EUR/SOV:MGARRISON  
D - DLAMB (SUBSTANCE)

-----105326 230115Z /64

O 230051Z JAN 78 ZFF6  
FM SECSTATE WASHDC  
TO AMEMBASSY ROME NIACT IMMEDIATE  
INFO WHITE HOUSE IMMEDIATE

S E C R E T STATE 017313

NODIS

E.O. 11652: XGDS-3

TAGS: TSPA, UR

SUBJECT: POSSIBLE RE-ENTRY OF NUCLEAR MATERIAL IN SOVIET  
COSMOS SATELLITE

REF: (A) STATE 013681 (B) ROME 1274

1. IN RESPONSE TO QUESTIONS IN REFTEL (B) THE FOLLOWING  
INFORMATION IS PROVIDED ON A BEST ESTIMATE BASIS:

A) IN THE EVENT THAT FRAGMENTS OF THE SATELLITE SHOULD  
IMPACT ON LAND AREA AND IN THE WORST CASE SHOULD CONTAIN  
- REACTOR FUEL, THEY WOULD POSE HEALTH HAZARDS  
IF APPROACHED MORE CLOSELY THAN ONE HUNDRED TO TWO HUNDRED  
FEET. EITHER AN INTACT REACTOR CORE OR EACH OF ABOUT

SECRET

SECRET

PAGE 02 STATE 017313

ELEVEN FUEL DISKS COULD POSE SUCH A PROBLEM. TO REDUCE THE  
RADIATION RISKS TO PERMISSIBLE LEVELS MAY REQUIRE A RADIUS  
OF ABOUT A THOUSAND FEET FROM POINT OF IMPACT. HOWEVER,  
OUR EXPERTS BELIEVE THERE  
IS HIGH PROBABILITY THAT THE REACTOR WILL DISASSEMBLE  
AND THE NUCLEAR FUEL BE CONSUMED DURING RE-ENTRY IN THE  
UPPER LAYERS OF THE ATMOSPHERE.

B) AS INDICATED IN PARA 3, REF (A) THE U.S. DOES NOT HAVE CONTINUOUS TRACKING CAPABILITY AND WE MAY NOT BE ABLE TO MAKE AN ACCURATE DETERMINATION OF THE PROBABLE AREA OF IMPACT. WE WILL NOT BE ABLE TO PREDICT THE PROBABLE AREA OF IMPACT IN ADVANCE OF THE EVENT IN ANY CASE, BUT WILL NOTIFY THE GOI AS SOON AS POSSIBLE THEREAFTER.

C) SHOULD RE-ENTERING MATERIAL IMPACT AT SEA THE HEALTH RISK IS CONSIDERED TO BE MINIMAL, POSSIBLE EXPOSURE BEING THROUGH THE FOOD CHAIN BUT WITH HIGH DILUTION.

D) BURNUP OF THE CORE MATERIAL IN THE UPPER ATMOSPHERE WOULD RESULT IN FISSION PRODUCTS RELEASED BETWEEN 200 AND 100 THOUSAND FEET. THIS WOULD BE A SMALL INSULT TO THE ENVIRONMENT, BUT THE HEALTH RISK WOULD BE NEGLIGIBLE. IT MAY EVEN BE SOME CONSIDERABLE TIME BEFORE SUCH PRODUCTS COULD EVEN BE DETECTED. VANCE

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NNN

## Message Attributes

**Automatic Decaptioning:** Z  
**Capture Date:** 01 jan 1994  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** CAT-B, NUCLEAR HAZARDS, SATELLITES, COSMOS 954  
**Control Number:** n/a  
**Copy:** SINGLE  
**Draft Date:** 23 jan 1978  
**Decaption Date:** 20 Mar 2014  
**Decaption Note:** 25 YEAR REVIEW  
**Disposition Action:** RELEASED  
**Disposition Approved on Date:**  
**Disposition Case Number:** n/a  
**Disposition Comment:** 25 YEAR REVIEW  
**Disposition Date:** 20 Mar 2014  
**Disposition Event:**  
**Disposition History:** n/a  
**Disposition Reason:**  
**Disposition Remarks:**  
**Document Number:** 1978STATE017313  
**Document Source:** CORE  
**Document Unique ID:** 00  
**Drafter:** RBEDDINGTON:MLK  
**Enclosure:** n/a  
**Executive Order:** X3  
**Errors:** 1  
**Expiration:**  
**Film Number:** n/a  
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**Office:** ORIGIN NODS  
**Original Classification:** SECRET  
**Original Handling Restrictions:** NODIS  
**Original Previous Classification:** n/a  
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**Previous Handling Restrictions:** NODIS  
**Reference:** 78 STATE 13681, 78 ROME 1274  
**Retention:** 0  
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**Review Content Flags:**  
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**Review Event:**  
**Review Exemptions:** n/a  
**Review Media Identifier:**  
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**Review Release Event:** n/a  
**Review Transfer Date:**  
**Review Withdrawn Fields:** n/a  
**SAS ID:** 3733717  
**Secure:** LOCK1  
**Status:** NATIVE  
**Subject:** POSSIBLE RE-ENTRY OF NUCLEAR MATERIAL IN SOVIET COSMOS SATELLITE  
**TAGS:** TSPA, MNUC, UR  
**To:** ROME WHITE HOUSE  
**Type:** TE  
**vdkgvwkey:** odb://SAS/SAS.dbo.SAS\_Docs/1e0825e1-c288-dd11-92da-001cc4696bcc  
**Review Markings:**  
Sheryl P. Walter  
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